

Lower Grand River

Conservation Opportunity Area



False aster and tickseed sunflowers brighten this wet bottomland prairie at Pershing State Park.

Ken McCarty, Missouri Department of Natural Resources

The Grand River is a large prairie river that once meandered across a broad, open floodplain. The floodplains of Grand River and its major tributaries were historically mosaics of marsh, wet prairie and bottomland forest. Upland prairies occurred on the surrounding plains.

Swan Lake National Wildlife Refuge, Pershing State Park, Fountain Grove Conservation Area and Yellow Creek Conservation Area are core managed areas central to the Lower Grand River Conservation Opportunity Area (COA). Each managed area is known for restored wetlands and associated plants, insects, amphibians, reptiles, birds and migrating waterfowl. Streams like Yellow Creek, Locust Creek and Parson's Creek are less channelized within the COA than upstream.

Wet bottomland prairies occur on floodplains of large prairie-region rivers. Depending on frequency of flooding and soil drainage, plant communities range from extensive stands of cordgrass with scattered wildflowers to patchy sedge meadows. Animals associated with wet prairies include the eastern tiger salamander, midland brown snake, eastern massasauga, American bittern, mallard, northern harrier and sedge wren.

Bottomland forests and woodlands occur on old oxbows and low ridges along prairie rivers and streams. Shallow seasonal flooding can last for more than a month. The canopy is dominated by bur oak. Fire keeps bottomland woodlands more open. Forested and wooded bottomlands along the Grand River provide habitat for great egrets, green herons, wood ducks and bald eagles.

Lower Grand River Conservation Strategies

- Restore riverine habitat abundance and diversity for native plants and animals.
- Restore bottomland forests and woodlands to provide habitat for native plants and animals, with emphasis on species of conservation concern.
- Manage wetlands and wet prairie habitats to benefit resident and migratory wildlife.
- Expand wet prairie habitat to allow the connection of Eastern massasauga populations at Pershing State Park and Swan Lake National Wildlife Refuge.
- Control populations of problematic exotic and invasive plants (e.g. Johnson grass, reed canary grass, garlic mustard).
- Educate landowners about the importance of conservation practices.



Jim Rathert, Missouri Department of Conservation

Snow geese are common migrants through Missouri. Their populations have increased to historically high levels.

Priority Research and Inventory Needs

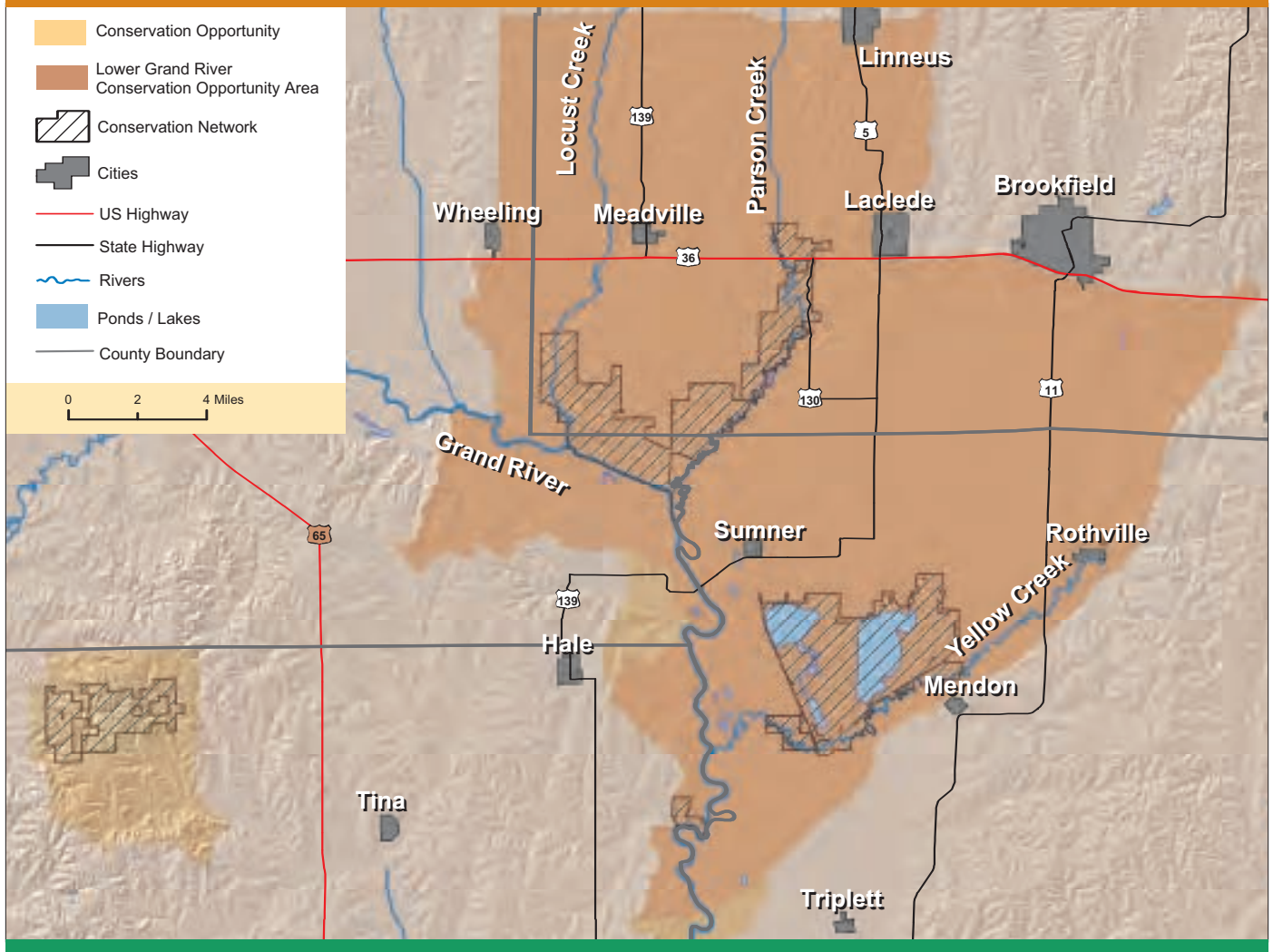
- Research methods to establish diverse wet prairies
- Evaluate the relationship between current floodplain habitats and changes in historic flood timing and duration.
- Evaluate ways to keep Locust Creek from rerouting into Higgins Ditch.
- Determine the impacts of wetlands on water quality.
- Develop techniques to increase sinuosity in the channelized portion of Parson's Creek on Fountain Grove Conservation Area.

Conservation Partners

Existing: Ducks Unlimited (DU); Grand River Audubon Society; National Wild Turkey Federation (NWTf); Missouri Conservation Heritage Foundation (MCHF); Natural Resource Conservation Service (NRCS); U.S. Fish and Wildlife Service (USFWS); Missouri Department of Natural Resources (DNR); Missouri Department of Conservation (MDC)

Potential: The Nature Conservancy – Missouri Chapter; Audubon Missouri; Missouri Brookfield Stream Team; private landowners

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Funding Sources

Existing: USFWS annual budget; DNR annual budget; MDC annual budget; Farm Service Agency Conservation Reserve Program; NRCS Wetland Reserve Program; NRCS Wildlife Habitat Incentive Program; NRCS Environmental Quality Incentives Program; SWCD State Cost Share Funds; EPA Region 7 Funds; DU Conservation Projects Program; QU Quail Habitat Incentive Funds; MCHF Stream Stewardship Trust Fund; Missouri Bird Conservation Initiative Grant; NWTF Wild Turkey Super Fund

Promising Future Sources: MDC State Wildlife Grants; MDC Wildlife Diversity Funds; National Fish and Wildlife Foundation Grants; USFWS North American Wetlands Conservation Act Grants; NRCS Conservation Security Program; Missouri Corn Growers Association Environmental Resource Coalition Research Funds

Existing Conservation Network

Swan Lake National Wildlife Refuge (Yellow Creek Research Natural Area); Pershing State Park (Locust Creek Natural Area, Cordgrass Bottoms Natural Area, Covered Bridge State Historic Site); Fountain Grove Conservation Area; Yellow Creek Conservation Area (Yellow Creek Natural Area); Little Compton Lake Conservation Area; Floyd Memorial Conservation Area; Sumner Access

A male common moorhen balances on a floating log. Wetlands in the Lower Grand River COA attract a variety of unusual birds on migration routes.



Jim Rathert, Missouri Department of Conservation

Locust Creek Natural Area



Buttonbush dominates the borders of this cutoff slough along Locust Creek in Pershing State Park. Locust Creek Natural Area represents one of the last examples of an active meandering river system in northern Missouri.

Tom Nagel, Missouri Department of Conservation

Conservation Challenges

Upstream soil erosion adds extra silt to bottomland forests and wet prairies, often killing canopy trees, reducing plant diversity and favoring garlic mustard invasion. In Locust Creek Natural Area (part of Pershing State Park) silt has covered much of the state park to depths exceeding 4 feet, killing canopy trees and destroying the cordgrass wet prairie for which Cordgrass Bottoms Natural Area is recognized.

Soil and water conservation efforts and the creation of forested buffer strips along upstream river channels are needed to reduce soil erosion and sedimentation. Additional challenges to conservation success include Locust Creek flows rerouting into Higgins Ditch, water pollution, invasive species and gaining landowner support.

To learn more about the Lower Grand River Conservation Opportunity Area, please contact:



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